## **REMARKS**

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

In the present Application, Claims 1-4, and 6-13 are active. The present Amendment amends independent Claim 1 without introducing any new matter.

The June 23, 2010 Office Action rejected Claims 1-3, 5-8, and 10-11 under 35 U.S.C. § 103(a) as unpatentable over Jones et al. (Canadian Pat. App. CA 2,321,462, hereinafter "Jones") in view of Fingerman et al. (U.S. Pat. No. 7,143,430, hereinafter "Fingerman"), Christopoulos et al. (U.S. Pat. Appl. Pub. No. 2001/0047517, hereinafter "Christopoulos"). Yoshimine et al. (U.S. Pat. No. 6,963,898, hereinafter "Yoshimine"), and in further view of Hasegawa et al. (U.S. Pat. Appl. Publ. No. 2004/0015992, hereinafter "Hasegawa"). Claim 4 was rejected under 35 U.S.C. § 103(a) as unpatentable over Jones in view of Fingerman, Christopoulos, Yoshimine, and Hasegawa and in further view of Perlman (U.S. Pat. App. Pub. No. 2002/0184637) and Solomon (U.S. Pat. App. Pub. No. 2003/0070174). Claim 9 was rejected under 35 U.S.C. § 103(a) as unpatentable over Jones in view of Fingerman. Christopoulos, Yoshimine and Hasegawa in further view of Ellis et al. (U.S. Pat. App. Pub. No. 2003/0149988, hereinafter "Ellis".) Claim 12 was rejected under 35 U.S.C. § 103(a) as unpatentable over Jones in view of Fingerman, Christopoulos, Yoshimine, and Hasegawa in further view of Slotznick (U.S. Pat. No. 7,058,356.) Claim 13 was rejected under 35 U.S.C. § 103(a) as unpatentable over Jones in view of Fingerman, Christopoulos, Yoshimine, and Hasegawa in further view of Mensch (U.S. Pat. App. Pub. No. 2002/0133824).

First, Applicants wish to thank Examiner Koenig and Thomas for the courtesy of an interview granted to Applicants' representative Nikolaus P. Schibli, Ph.D., Reg. No. 56,994, on September 22, 2010, at which time the outstanding issues in this case were discussed.

Arguments similar to the ones developed hereinafter were presented, and the Examiners

recommend that Applicants' independent Claim 1 be amended to clearly recite that the television signals are stored in a digital format that is based on the *quality parameters* that are included in the recording instructions. Moreover, they also indicated that that in light of this amendment and the arguments, independent Claim 1 appears to be patentably distinct over the references of record, and that they would perform a new prior art search before making any decision on patentability.

In response, Applicants' independent Claim 1 is amended to recite that the controlling central unit stores "the television signals in the digital format on the storage unit based on the recording instructions including information on a television channel specified by the channel number, the recording timing, and *the quality parameters*." These features find non-limiting support in Applicants' disclosure as originally filed, for example in the specification at page 12, lines 18-26. No new matter has been added.

In response to the rejection of Claim 1 under 35 U.S.C. § 103(a), Applicants respectfully request reconsideration of this rejection and traverse the rejection, as discussed next.

Briefly summarizing, Applicants' independent Claim 1 is directed to a system for recording and playback of television signals from a plurality of television channels. The system includes, *inter alia*: an instruction unit configured to receive and store recording instructions from users via the telecommunication network, *the recording instructions including a user identification of a mobile terminal, a channel number, recording timing, and quality parameters*, and configured to instruct the controlling central unit to select and store the television signals in the digital format on the storage unit based on the recording instructions including *the quality parameters*, and a playback module configured to transmit the television signals stored in the digital format on the storage unit via the telecommunication network for playback to a display terminal associated to the user, the

display terminal being identified by a network address that is linked to the user identification assigned to the respective stored television signals of the storage unit, and to transmit the television signals that are stored in the digital format on the storage unit, via the telecommunication network to the display terminal associated with the user, in a format that depends upon the quality parameters, wherein the quality parameters include information on display resolution of the respective display terminal, and transmission speed of the telecommunication network to the respective display terminal.

As explained in Applicants' specification in a non-limiting example, the features of Applicants' independent Claim 1 allow to store television signals in a storage unit in different transmission formats that are configured *based on information provided by a user's recording request*, allows a more flexible system dedicated for a variety of different user terminals. This system allow to directly adapted the data amount of the transmission by the user and his associated terminal. Moreover, the system also directly adapts the digital data format to different transmission speeds, desired image quality, and even current costs for bandwidth in the network connection. Please note that this discussion related to the features of Applicants' independent Claim 1 is provided for explanatory purposes only, and shall not be used to limit the scope of the claims in any fashion.

The pending Office Action admitted that the applied reference <u>Jones</u> fails to teach an instruction unit that can receive user instructions to control a central unit. (Office Action, p. 4, ll. 1-9.) But the Office Action asserted that <u>Fingerman</u> in combination with the reference <u>Cristopoulos</u> teaches such a feature, and also asserted that the combination of these two references with <u>Jones</u> is proper. (Office Action, from p. 4, l. 14, to p. 5, l. 22.) Applicants traverse both of these assertions, as next discussed.

The reference <u>Christopoulos</u> is directed to a system that includes a server 110 for storing multimedia data, a gateway 120 for transcoding multimedia data, and a client 135 for

playing the multimedia data. (Christopoulos, Abstract, Fig. 1, ¶¶ [0021], [0035].)

Christopoulos explains that the gateway 120 stores the multimedia data together with "transcoder hints." (See Christopoulos, ¶ [0036], Il. 2-7, see also Fig. 2.) Christopoulos makes it clear that every piece of multimedia data has "transcoder hints" associated thereto, and the transcoder hints include information on "user preferences, client capabilities, link characteristics and/or network characteristics." (Christopoulos, ¶ [0039].) Moreover, the "transcoder hints" are pre-stored in the server 110 together with the multimedia data, and are not provided by the client 135 upon requesting certain multimedia data. (See Christopoulos, ¶ [0037], Il. 1-10, ¶ [0038], Il. 1-9, see Fig. Steps 310, 320.) Once a client 135 makes a request to view multimedia data to the transcoder 120 in Step S330, transcoder 120 requests the multimedia data and the associated transcoder hints from server 110 in Step S340, so that the multimedia data can be transcoded based on these hints in Step S360, for example by converting CIF video data into a lower-resolution QCIF video data. (Christopoulos, ¶ [0038], ¶ [0047], Il. 1-13, Figs. 3, 6.)

However, Applicants' independent Claim 1 requires the following features that are not taught by the reference <u>Christopoulos</u>:

an instruction unit configured . . . to instruct the controlling central unit to select and store the television signals in the digital format on the storage unit based on the recording instructions including information on a television channel specified by the channel number, the recording timing, and the quality parameters.

(Claim 1, portions omitted, emphasis added.) First, <u>Cristopoulos</u> fails to teach that the "recording instructions" from the user actually include "the quality parameters [with] information on display resolution of the respective display terminal, and transmission speed of the telecommunication network to the respective display terminal," as required by Applicants' independent Claim 1. As discussed above, in <u>Cristopoulos</u>, the transcoder hints are pre-stored in the server 110 and fixedly linked to the multimedia data, as shown in his

Figure 2. (See e.g. Fig. 3, Step S310, S320.) Moreover, the request from the client 135 is totally unrelated to the transcoder hints that are stored in the server 110. (See <u>Cristopoulos</u>, Fig. 3, Step S330.)

Second, the reference <u>Cristopoulos</u> is silent on the feature that the quality parameters received via the recording instructions "include information on display resolution of the respective display terminal." <u>Cristopoulos</u> merely mentions that the "transcoder hints" may include information on a bit rate and resolution of still images. (<u>Cristopoulos</u>, ¶ [0039], ll. 7-11.) In this respect, <u>Cristopoulos</u> thereby either forces the images that are sent to client 135 into a specific image resolution, or crops the image to a certain size, but does not flexibly store television signals to meet requirements of a "display resolution of the respective display terminal, and transmission speed of the telecommunication network to the respective display terminal," as required by Applicants' independent Claim 1.

Therefore, even if the combination of <u>Cristopoulos</u>, <u>Jones</u> and/or <u>Fingerman</u> is assumed to be proper, the cited passages of the combination fails to teach every element of Applicants' Claim 1. Accordingly, Applicants respectfully traverse, and request reconsideration of this rejection based on these references.

Moreover, Applicants also traverse the obviousness of the combination of the references <u>Cristopoulos</u>, <u>Jones</u> and/or <u>Fingerman</u>. In this respect, the reference <u>Fingerman</u> is directed to a client server 49 for receiving requests for remote storage of time-scheduled media programs from a client 11, 13, 15, 16 over the Internet 17, and the delivery of such media programs in a specific streaming format to the respective clients 11, 13, 15, 16.

(<u>Fingerman</u>, Abstract, II. 1-5, Fig. 1.) <u>Fingerman</u> explains that when a client first request a media program from request server 49, the desired streaming video format is specified with the request. (<u>Fingerman</u>, col. 6, II. 55-59.) The scheduler 20, in response to the request information, identifies the requested playback format to the video digitizer selected to record

the video program. (Fingerman, col. 6, ll. 59-61, Fig. 2.) The video digitizer then converts the uncompressed AVI of the video program into the requested format before storage in a high capacity store. (Fingerman, col. 6, ll. 61-64.) Accordingly, Fingerman describes that the video is first stored as an uncompressed AVI at the media delivery system based on a message from the client server 49. (See Fingerman, col. 6, ll. 29-40, col. 61-64.) In these passages, Fingerman explains the following:

When a client first request a media program from request server 49, the desired streaming video format is specified with the request. The scheduler 20, in response to the request information, identifies the requested playback format to the video digitizer selected to record the video program. The video digitizer then converts the uncompressed AVI of the video program into the requested format before storage in a high capacity store.

(<u>Fingerman</u>, col. 6, ll. 57-64.) In other words, in <u>Fingerman</u> always first stores video signals as uncompressed AVI, before converting the video into a desired streaming video format.

In contrast, the reference <u>Cristopoulos</u> pre-stores the transcoder hints in the server 110, and they are not provided by the client 135 upon a request, as discussed above. In addition, Cristopoulos explains the following:

It will be recognized that the receipt of and storage of client capabilities, user preferences, link characteristics and/or network characteristics is normally only performed during an initialization process between the client and the transcoder. After this initialization process, the transcoder can request the transcoder hints from the server based upon these stored client capabilities, user preferences, link characteristics and/or network characteristics.

(<u>Cristopoulos</u>, p. 4, ¶ [0038], II. 10-19.) In other words, <u>Cristopoulos</u> makes it clear that the server 110 pre-stores such transcoder hints, and links them in a table to the respective multimedia data in server 110. (See <u>Cristopoulos</u>, Fig. 2.) Therefore, Applicants believe that the combination of both the features of <u>Fingerman</u> related to the request to the client server 49 for remote storage from a client 11, and <u>Cristopoulos</u>' pre-stored transcoder hints into <u>Jones</u>' system for on-demand delivery of internet protocol packets for multicast streaming is not obvious, because these features contradict each other.

Moreover, the reference <u>Jones</u> clearly requires that all the digital television broadcast be converted into a uniform Internet Protocol (IP) format signal, as IP Multicast Single-Program Transport Streams (SPTS), before the network transmission over the broadcast provider network 16. (<u>Jones</u>, p. 6, ll. 11). In addition, the IP format signal of the digital television broadcast is then locally adapted for display at the user's terminal, for example with a set-top box 22, or with the personal computer 30. (<u>Jones</u>, from p. 8, l. 23, to p. 9, l. 7, p. 11, ll. 19-30.) Regarding the uniform distribution of the video as IP format signal, <u>Jones</u> explains "[f]or large amounts of data (including video transmissions), IP multicast is more efficient that normal Internet unicast transmissions because the server can broadcast a message to many recipients . . . IP multicasting allows many recipients to share the same source. This means that just one set of packets is required to be transmitted for all the destinations." (<u>Jones</u>, p.7, ll. 1-11.) <u>Jones</u> thereby stresses the importance of using a uniform IP packet for video distribution for many different users.

Accordingly, <u>Cristopoulos</u>' pre-storing of transcoder hints to transcode multimedia data stored in a server 110 to match specific user requirements are *in direct contradiction* with <u>Jones</u>' system of multicasting multimedia data as uniform IP data packets, that can be shared by many different users. Therefore, <u>Jones</u> teaches away from the solution proposed by <u>Cristopoulos</u>. In this respect, a reference may be said to teach away when a person of ordinary skill in the art, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. *In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994). In light of the above reasoning, Applicants traverse the obviousness of the combination of the references <u>Cristopoulos</u>, <u>Jones</u> and/or <u>Fingerman</u>.

Consequently, in view of the present Amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in

Application No. 10/791,831 Reply to Office Action of June 23, 2010

condition for formal Allowance. A Notice of Allowance for Claims 1-4 and 6-13 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the below listed telephone number.

Respectfully submitted,

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